

Student Learning Objective (SLO) Example

Grades 9-10 Agriculture Science and Technology

Teacher Name: EXAMPLE			Teacher School: EXAMPLE		
	valuator Nam valuator Posi	ne: EXAMPLE tion/Role: EXAMPLE			
Grade Level: 9th-10th			SLO Content Area: Agriculture Science and Technology		
SLO T Choose	ype: se One Individual Team	(written by an individual teacher) (team of teachers focus on a similar goal but are held accountable for only their students)	SLO Approach: Choose One Class (covers all of the students in one class period i.e., 2nd period Biology, 4th period Beginning Pottery, etc.) Course (covers all of the students enrolled in multiple sections of the course (i.e., all of a teacher's Biology 2 students, all of a teacher's Beginning Pottery students, etc.)		
Choose □ □ If Oth indica	te days of ins	tionale (i.e. quarter long course) and	Assessment Date: 9/15/15 Post Assessment Date: 3/7/16		



I. Student Population

Provide a detailed description of the student population. Information should include, but is not limited to, the following: the number of students in the class, a description of students with exceptionalities (e.g., learning disability, gifted and talented, English language learner [ELL] status, etc.), and a description of academic supports provided to students (e.g., extended time, resource time with EC teacher, any classroom supports that students receive to help them access the core curriculum).

The 21 students in my class represent grades 9-10. Most are grade 9 students (14 of the 21 students). This is a prerequisite class to other, advanced agriculture courses, or can be an elective credit. Those taking this as an elective credit are typically the students that do not have a family history of farming, and do not enter the track thinking they will continue in agriculture. The other students are planning to continue farming, and are likely to take the other classes within the course.

All 21 students within this class are included in the SLO. Two of the students are students with identified learning disabilities in reading. Both of these students scored in the low range on the pre assessment.

II. Historical and Trend Data

Describe the applicable past data for the students. In your description included the students' level of knowledge prior to instruction, including the source(s) of data (e.g., formative and summative assessments, anecdotal data gathered from collaboration with other educators) and reflect on the relevance to the overall course objectives.

Over the past three years, students have slowly improved their performance on the discussion and conclusion portion of the FAA Agriscience Fair Guidelines rubric:

Year	Average Score on
	Discussion and Conclusion
2011-12	12.4
2012-13	13.6
2013-14	14.1

Additionally, I reviewed the state required ELA testing results for the students to include grade 8 PASS results and grade 9 ELA end of course exams. I reviewed this data to determine typical performance in students in order to set initial growth goals. In this case, the baseline assessment mirrored typical performance, so no adjustment was needed in initial growth goals.

III. Baseline Data

Describe which pre-assessment(s) will be used to measure student learning and why the assessment is appropriate for measuring the objective(s). Provide baseline assessment results for the student population. Attach the assessment and grading scale and/or rubric used to score the assessment(s).

The Pre and post assessment is a performance task using a teacher created performance rubric (see attached) that is aligned to the Discussion and Conclusion portion of the FFA Agriscience Fair Guidelines rubric (copied below):



Area	Total Points	High Points	Medium Points	Low Points	Points
	Possible	5-4	3-2	1-0	Earned
Discussion and Conclusion	20 Points Weighted Area	drawn directly from the results of the study and relate directly to the hypothesis. Brief recap of the results is included and shown how they were foundation of the study. Sound reasoning is shown that conclusions are based on results and literature. Discussion refers to facts and figures in the results	study and partially re- late directly to the hy- pothesis. Brief recap of the results is included and shown how they were foundation of the study. Unsound rea- soning is shown that conclusions are based on results and litera- ture. Discussion refers to facts and figures in	results is included or poorly shows how they were foundation for the study. Conclusions are not based on results or literature. Discussion poorly refers to the facts and figures in the results section. Excessive spelling or grammar errors are	X4 =

The FFA Agriscience Fair Guidelines rubric clearly describes performance levels, but the small range of points students can earn makes it difficult for students to show growth over time. I used this rubric as the basis of the teacher-created performance rubric, which has a wider range of possible points.

I administered a baseline writing assessment to the 21 students in my Agriculture Science and Technology course to see how well they could construct a clear, concise response to a community members concern over the methods used to prepare farm fields in preparation for planting crops. The concern related to impact on local wildlife populations.

This scenario is one of several possible focus areas within the FFA Agriscience Fair Guidelines projects. The task asked that they respond to the concern, and offer one research-based justification for the practice. Prior to the prompt, students were given a primary source article outlining approaches to field preparation. We discussed the pros/cons of various approaches in class and its impact on wildlife populations.

The baseline performance assessment is based on the Discussion and Conclusion portion of the FFA Agriscience Fair rubric above.

The results from the baseline performance assessment which focused on the *Discussion* portion of the project only (as this section addresses the area of concern) are as follows:

Students	Baseline Score
1 student	4 – 6 points
6 students	6 – 8 points
11 students	9 – 11 points
3 students	12 – 14 points
0 students	15+ points

Most students showed stronger performance in linking their conclusions directly to their hypothesis. Most students showed weaknesses in summarizing their findings clearly and supporting their conclusions by citing their study.



IV. Post Assessment

Indicate what assessment will be used as a post assessment and how it is aligned to the baseline assessment. The performance rubric above will be used as both the pre and post assessment where students are prompted to write a response, citing specific research/references to support their thoughts. The student's discussion portion of the science fair project will provide the basis for the post assessment.

To ensure that scoring is consistent and fair, I will ask that the ELA teacher do a secondary scoring of the writing prompts as she is the expert in this area.

V. Progress Monitoring

How frequently will you progress monitor students' mastery of content? Indicate what ongoing sources of evidence you will collect in order to monitor student progress. (Other evidence of student growth can include student work samples, portfolios, etc.)

In January, students will engage in a writing activity similar to the activity as the baseline activity to assess student progress and determine if strategies, supports or growth targets need adjustment.

Additional evidence of student growth will be gathered through the addition of an essay question on summative tests, collected student work, 1X weekly practice prompts, project(group work) dialogue, and whole class discussion questions and response.

Collaboration for support of this SLO includes consultation with the ELA teacher(s) for review of benchmark assessments and accuracy of scoring. Additionally, I will calendar time with the Learning Strategist before each of the course units to review reading material and discuss support strategies needed for the two students she supports. We will schedule in class supports for the benchmark assessment days, as well as develop a graphic organizer that those students can use during the assessment. If necessary, I will use supportive technology to deliver readings orally.

VI. Learning Goal (Objective)

Provide a description of what students will be able to do at the end of the SLO Interval. The Learning Goal (objective) is based on and aligned with course- or grade-level content standards and curriculum. The goal should be broad enough to capture major content, but focused enough to be measureable.

Students will demonstrate improvement in their ability to cite evidence in their writing, leading to improved college and career readiness and performance in the district's FFA/Agriscience Fair activities as measured by the teacher created writing rubric which is aligned with Agriscience Writing Rubric (NAEE, attached).

VII. Standard (s)

Identify the content standard(s) and indicators that align to the SLO learning goal (objective).

Grade 6-12 Core Writing Standards: Research to Build and Present Knowledge:

Draw evidence from literary or informational texts to support analysis, reflection, and research.

SC Career and College Ready ELA standards:

Logical Reasoning: Student appropriately employs a variety of strategies to discern the meaning of increasingly complex texts and other modes of communication to form logical, evidence-based conclusions.

SC CATE Course Unit alignment:

UNIT A: Developing leadership skills in agriculture

UNIT B: Agricultural literacy in agriscience and technology



VIII. Growth Targets		wth Targets
	Α.	Choose One
		Tiered
		Individual
		Targeted (Sub population(s) of students are the focus of the SLO goal. Appropriate for course approach as a second SLO when the first includes all students.)

B. Considering all available data, identify the targets the students are expected to reach by the end of the SLO interval. List the growth target information below or on an attached spreadsheet.

These targets will require all students to significantly improve their performance over the year. Students scoring in the low range will be expected to score in the mid range on the post-assessment, and some students scoring in the mid range will be expected to move into the high range.

Students	Baseline Score	Growth Targets
1 student	4 points	6 points
6 students	6 – 8 points	5 points
11 students	9 – 11 points	4 points
3 students	12 – 14 points	3 points
0 students	15+ points	N/A

C. Provide a rationale for the growth targets. Rationale may reflect typical vs. pretest performance, may include reasoning for using individualized targets for some but not all students, or any other influencing information used to determine anticipated growth.

As part of the Intro to Agricultural Sciences course, students are expected to prepare an FFA Agriscience Fair project and enter it into the regional fair. This entry is a cornerstone project that showcases their research throughout this course. Although the students enter one project per group, each individual student is to demonstrate knowledge, and performance related each component of the project in a variety of ways to include a research report.

My students represent a mix of students, grades 9 and 10. Many of my students are third generation farmers, and intend to continue practicing in the family business. They have grown up mirroring the practices handed down through generations. These students are completing the continued coursework within the cluster in order to achieve completer status, while others are "exploratory" with interest but uncertain if completing the entire course curricula.

Students completed a perception survey at the beginning of the course, and identified that farming today brings greater challenges. This survey was completed in collaboration with a senior family or community member who is involved in farming. Specifically they identified instances where their family or someone they knew was called upon by local governments to explain, and defend farming practices.

Successful completion of an FFA science fair project is an expectation of all of the students in this class. A written research report is part of the requirement for an entry.

Over the past three years, the written report portion of the project has created the greatest challenge for my students. The students must be able to access reliable resources, read them and then apply that knowledge to their farming practices. Using concrete examples to support ideas in writing is one area in which I have provided the most individualized instruction to students.

By focusing my SLO around this skill, I am able determine growth related to the student's ability to utilize multiple sources of information in their writing, thus strengthening their ability to respond to community issues related to their farming practice and to better prepare that portion of the project for the course.



This growth can be measured using the FFA Agriscience Fair rubric – specifically the research paper's discussion section as well as the teacher created performance (attached) rubric that reflects the sub skills indicated in this portion of the FFA rubric:

- Conclusions relate directly to results and identify whether hypothesis was or was not supported.
- Ability to summarize
- Conclusions directly link research and literature
- Grammar

IX. Instructional Strategies

A. Describe the best instructional practices you will use to teach this content to students. Include how instruction will be differentiated based on data. What interventions will be used if more assistance is needed during the learning progress?

1x weekly I will use primary source documents as the basis for learning, reacting to, and discussing current issues related to agricultural practices. I will have students read, discuss, and then write a response – using the reading resources to back their conclusions with evidence.

Additionally, I will note discussion responses and daily work to determine which students need individualized and small group direct instruction.

For the two students with identified reading challenges, I will work with the LD strategist to select appropriate reading materials that allow for the students to engage in the task in meaningful ways.

I have not focused on direct writing instruction within my content in the past. To be successful I will need some professional development related to writing instruction. There is a district workshop on "6 traits writing" on Dec. 6th I plan to attend.

Additionally, I will need assistance on how to access appropriate reading resources for the students. My students are reading at all different levels, so I need an understanding of reading levels and how to use Lexiles to find reading resource appropriate for all of the students. To accomplish this I have a meeting scheduled with the library media specialists and reading strategist for support.

I will attend all regional CATE meetings that allow for collaboration and discussion of SLOs within CATE in order to learn from other educators about strategies that are working. Those meetings are Jan 15 and March 17.